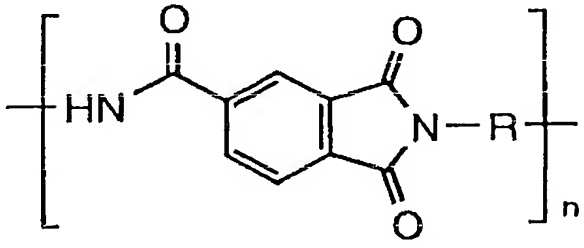
Claims

1. A multicolor image forming material comprising an image receiving sheet containing an image receiving layer and at least four heat transfer sheets each containing at least a light-heat conversion layer and an image forming layer formed on a support, each of the heat transfer sheets being adapted to be superposed on the image receiving sheet with the image forming layer facing the image receiving layer and irradiated with laser light to transfer a laser-irradiated area of the image forming layer to the image receiving layer of the image receiving sheet to record an image, wherein the light-heat conversion layer contains a polyamide-imide as a binger.

2. The multicolor image forming material according to claim 1, wherein a polyamide-imide represented by the following general formula (I) is used as the binder:

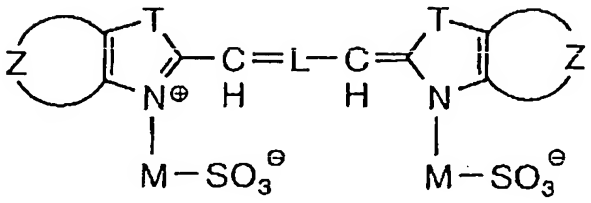


(I)

wherein R represents a divalent linking group.

3. The multicolor image forming material according to claim 1 or 2, wherein a colorant represented by the following general formula (I') is used as a light-heat converting

substance in the light-heat conversion layer:



(I')

wherein Z represents an atomic group for forming a benzene ring, a naphthalene ring or a heterocyclic aromatic ring;

T represents -O-, -S-, -Se, $-N(R^1)-$, $-C(R^2)(R^3)-$ or $-C(R^4)=C(R^5)-$, in which R^1, R^2 and R^3 each independently represent an alkyl group, an alkenyl group or an aryl group, and R^4 and R^5 each independently represent a hydrogen atom, a halogen atom, an alkyl group, an aryl group, an alkoxy group, an aryloxy group, a carboxyl group, an acyl group, an acylamino group, a carbamoyl group, a sulfamoyl group or a sulfonamido group;

L represents a trivalent linking group formed by five or seven methine groups bonded to each other via conjugated double bonds;

M represents a divalent linking group; and

X^+ represents a cation.

4. The multicolor image forming material according to any one of claims 1 to 3, wherein the polyamide-imide has a glass transition temperature of 260°C of higher.

5. The multicolor image forming material according to any of claims 1 to 4, wherein the polyamide-imide has a 5% mass reduction temperature determined by a TGA method of 400°C or higher.

6. The multicolor image forming material according to any of claims 1 to 5, wherein a degree of deformation (deformation percentage) calculated in accordance with the following numerical formula (1) in the laser-irradiated area of the light-heat conversion layer observed under a laser microscope is 150% or more:

Numerical formula (1)

$$\text{deformation percentage (\%)} = \{(a + b)/(b)\} \times 100$$

wherein a stands for a cross-section area of the light-heat conversion layer having been enlarged after irradiation; and b stands for a cross-sectional area of the light-heat conversion layer before irradiation.

7. The multicolor image forming material according to any of claims 1 to 6, wherein the binder in the light-heat conversion layer has a cohesive energy density of 27 or more.

8. The multicolor image forming material according to

any of claims 1 to 7, wherein a ratio of optical density (OD) to layer thickness (μm) (OD/layer thickness) of the light-heat conversion layer is 0.57 or more.

9. A multicolor image forming material comprising an image receiving sheet containing at least an image receiving layer formed on a support and at least four heat transfer sheets each containing at least a light-heat conversion layer and an image forming layer formed on a support, each of the heat transfer sheets being adapted to be superposed on the image receiving sheet with the image forming layer facing the image receiving layer and irradiated with laser light to transfer a laser-irradiated area of the image forming layer to the image receiving layer of the image receiving sheet to record an image, wherein a difference in a visible light range between a reflectance of the image forming layer of each heat transfer sheet before the irradiation with laser light and recording of an image and a reflectance of the image forming layer transferred to the image receiving layer of the image receiving sheet due to the irradiation with laser light is 10% or less.

10. A multicolor image forming material comprising an image receiving sheet containing at least an image receiving layer formed on a support and at least four heat transfer sheets each containing at least a light-heat conversion layer and an

image forming layer formed on a support, each of the heat transfer sheets being adapted to be superposed on the image receiving sheet with the image forming layer facing the image receiving layer and irradiated with laser light to transfer a laser-irradiated area of the image forming layer to the image receiving layer of the image receiving sheet to record an image, wherein a color difference between a color hue of the image forming layer of each heat transfer sheet immediately after the transfer to the image forming layer of the image forming sheet due to the irradiation with laser light and before exposure and a color hue thereof after exposure does not exceed 2.

11. The multiple color image forming material according to claim 9 or 10, wherein a binder resin in the light-heat converting layer of each heat transfer sheet has an SP value determined in accordance with Okitsu's method of 25 or higher.

12. The multiple color image forming material according to claim 10 or 11, wherein a colorant represented by the above general formula (I') is used as a light-heat converting substance in the light-heat conversion layer.

13. The multiple color image forming material according to any of claims 1 to 12, wherein a resolution of a recorded

image is 2000 dpi or higher.